A NEW ZEUGMATOTHRIPS FROM BRAZIL

(THYSANOPTERA, PHLAEOTHRIPIDAE)

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The genus *Zeugmatothrips* Priesner is one of the more distinctive genera in the Neotropical fauna, and its known species, now fifteen in number, form a compact group much alike in aspect, habits, and behavior. They range from Mexico to Trinidad, Peru, and Brazil. All of them feed upon fungus spores and the accompanying gelatinous matter—such is true, at any rate, of the thirteen species which the author has described. Though in general appearance they suggest a diminutive *Actinothrips*, they are doubtless more closely related to the African *Zeugmatothripoides* Bagnall, represented by one species of unknown habits taken in Sierra Leone and distinguished principally by chaetotactic differences.

Zeugmatothrips pallidulus, sp. nov.

Figures 1 and 2

Female, forma macroptera.—Length about 2.6 mm. **Color** to naked eye or under low magnifications, by reflected light, dark brown in fore part of and along sides of head, blackish brown to nearly black in abdominal segments III-X (most of these segments a trifle paler posteriorly, IX paler throughout), the remainder of head, all of thorax, and segments I and II of abdomen pale brown, the contrast between II and III marked, II with a pair of well-separated rounded dark spots at middle, III-VII with a more or less darkened area occupying about median one-third of anterior portion, these spots margined in front and at sides by a heavy black line; legs pale dull yellow excepting the light brown fore and middle coxae, the black tarsal cups, and the nearly colorless ends of femora and tibiae; internal pigmentation red[1]; antennae with segments I and II blackish brown, about concolorous with head, but with I pale basally and II yellow apically; III-V dull yellow, IV and V lightly touched with gray in swollen apical portion, VI dull yellow in pedicel, shaded with gray-brown in apical three-fifths; VII and VIII gray-brown, each more or less yellowish basally; wings of both pairs pale brownish yellow, palest in a narrow streak just in front of the usual vein, which is brownish yellow and darkest near middle of wing.

Head (Fig. 1) with total length about 1.6 times its greatest width, which is across eyes, the cheeks broadest just behind a slight postocular notch, nearly as wide at basal third, narrowed just in front of distal third and again in front of basal collar; head produced between eyes and antennae, the sides of this production deeply and roundly emarginate, its greatest width (anteriorly, near bases of antennae) about 103μ, its length in front of eyes about 52μ; dorsal surface of head conspicuously and sharply polygonally reticulate, excepting in the head-process and in the area of the four major setae, the reticles not wrinkled; postocular setae brown, moderately long (about 95μ), stout, knobbed, and arising from conspicuous elevations, their bases on a line with posterior margins of eyes, the interval between

[1] Living or very freshly-mounted specimens, to judge from other species which I have myself collected, may possibly have in addition chalky-white internal areas in the legs or beneath intersegmental membranes in the body.

these setae about 63μ; dorso-cephalic setae similar to postoculars in form and color but much shorter (51μ), about 34μ apart, and arising about 13μ behind them; genal setae very pale, slender, and pointed. **Eyes** distinctly protruding, with an enlarged facet or two on sides behind middle, these producing a slight subangulation when the eyes are observed from above; dorsal length of eyes (89μ) nearly 0.3 that of head, their width about 54μ, their interval about 83μ. **Antennae** (Fig. 2) less than 2.2 times as long as head, formed as usual in the genus, the intermediate segments with long slender pedicels; segment I with the usual long dark brown knobbed seta arising from a distinct tubercle; II with the inner seta near middle of dorsum rather large, pale brown, and knobbed at tip, but much shorter and much more slender than the large one on dorsum of I; III and IV each with two strong dorsal knobbed setae (instead of the single one found in some species), these brown in color with bases nearly black; V with the usual similar single dark dorsal seta; sense-cones long, slender, pale, and pointed, III-V each with one on inner and one on outer surface, V with an additional smaller one on dorsum at apex, VI with one on inner surface and a shorter one on dorsum, VI with the usual large one on outer dorsal surface. **Mouth-cone** semicircularly rounded at tip, extending about 104μ beyond posterior dorsal margin of head.

Prothorax (Fig. 1) with median length of pronotum about 0.56 that of head and contained in the trans-coxal width about 1.9 times; pronotum with anterior margin nearly straight, its surface lightly reticulate in about anterior half, lightly cross-striate posteriorly with widely-spaced anastomosing lines; epimeron and episternum fused with each other and with notum; antero-marginal setae 75μ, antero-angulars 128, midlaterals 64, epimerals 116, postero-marginals 65, coxals 53. **Legs** normal to the genus (fore leg shown in Fig. 1), the usual knobbed setae disposed as usual; fore tarsi not toothed. **Wings** of both pairs typical, long, narrow, and of nearly equal width throughout; fore wings with the three subbasal setae knobbed, measuring 21, 35, and 45μ, respectively. **Mesothorax** much narrower than metathorax, the latter about 419μ wide and much swollen at sides and with the usual knobbed pleural seta; metanotum reticulate like head and with a pair of strong knobbed setae, these about 39μ long and 92μ apart.

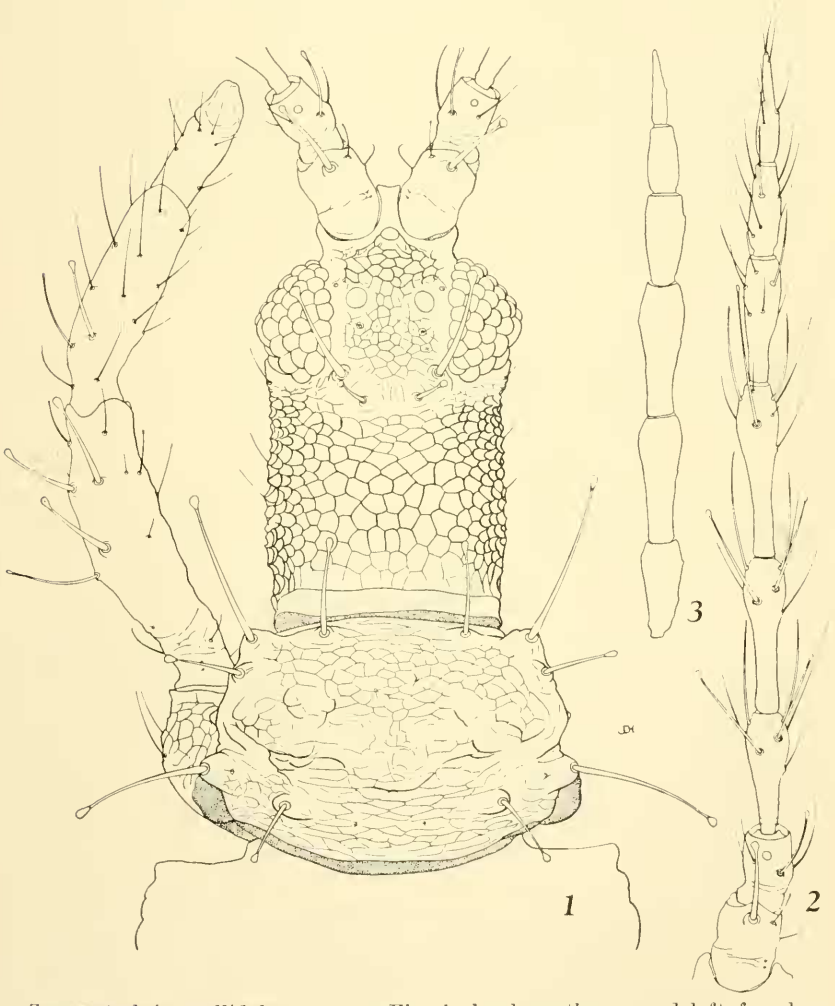
Abdomen normal, broadest at segment II; median tergite of I hat-shaped, about 77μ long medially and 230μ wide, not connected with the lateral tergites; terga III-VIII without a pair of pores on antecostal line; abdomen heavily reticulate over most of surface, both dorsally and ventrally; most major setae very similar to those on prothorax, knobbed like them, and brownish yellow in color, terga I and II each with one pair, III with two, IV-IX each with three. **Tube** (segment X, only) less than twice as long as head and nearly 6 times as long as greatest basal width (which is across the basal collar), this dimension fully 2.8 times the width of the narrowed tip; surface with numerous gray clothing hairs, all pointed, the longest considerably exceeding the greatest width of tube; extreme base of tube reticulate, remainder longitudinally ridged.

Measurements of female (holotype), in mm.: Length about 2.5 (partially distended, 2.64); head, total length 0.308, width across eyes 0.192, across postocular notch 0.174, across cheeks just behind eyes 0.176, least width near anterior third of cheeks 0.167, at basal third of cheeks 0.171, in front of basal collar 0.160, across basal collar 0.162; pronotum, median length 0.173; width of prothorax (inclusive of coxae) 0.326; mesothorax, width across anterior angles 0.335; metathorax,

greatest width 0.419; fore wings, length 1.10; abdomen, greatest width (at segment II) 0.420; tube (*X*, only), length 0.602, width across basal collar 0.106, subbasal width 0.101, least apical width 0.037, terminal setae 0.130; seta I on IX 0.102, II 0.118.

Antennal segments:	I	II	III	IV	V	VI	VII	VIII
Length (μ):	60	61	86	110	120	90	66	79
Width (μ):	46	37	31	32	33-34	28	22	16-17

Total length of antenna, 0.672 mm.



Zeugmatothrips pallidulus, sp. nov. Fig. 1: head, prothorax, and left fore leg; ♀, holotype (macropterous); all sculpture shown; × 92.5. Fig. 2; Same specimen, left antenna; all sculpture shown; × 92.5. Fig. 3: *Z. cinctus* Hood; outline of antennal segments III-VIII; ♀, paratype (macropterous); × 92.5.

Female, forma brachyptera.—Color and structure as in macropterous form, except for the short wings (about 0.259 mm.).

Male (brachypterous).—Length about 2.5 mm.; more slender and paler and somewhat more yellowish than female, but sculpture and structure not noticeably different; fore tarsi unarmed; sterna without glandular areas.

BRAZIL: Linha Facão, Santa Catarina, May, 1957, Fritz Plaumann, 1 macropterous ♀ (holotype), 12 brachypterous ♀ ♀ (including morphotype), and 1 male (allotype), from fallen leaves. The types are in the author's collection.

Superficially, this species resembles *Z. cinctus* very closely because of the pale base of the abdomen. Its true relationship, however, is probably more with *Z. gracilis*. From the former it may be readily known by the pale legs and the more slender antennae (compare Figs. 2 and 3); while from the latter it may be distinguished by the differently colored thorax and abdomen, the somewhat shorter antennae, the less rounded eyes, and the long, knobbed metanotal setae.

Zeugmatothrips cinctus Hood

Figure 3

Hood, 1952, Proc. Biol. Soc. Washington, 65:171.

This reference is introduced to keep the outline drawing of the antenna from being overlooked.

NEW RECORDS FOR THE RICE DELPHACID, SOGATA ORIZICOLA MUIR, IN THE UNITED STATES

(HOMOPTERA, DELPHACIDAE)

Muir (1926, Bull. Hawaiian Sugar Planters Assoc., Div. Ent., 18:1-51) described *Sogata orizicola* from a series of ten males and two females which were taken in association with rice at Blairmont, British Guiana. Additional Neotropical records for this species include Argentina, Colombia, Cuba, Costa Rica, and Venezuela. *S. orizicola* is now known from two localities in the United States, having been collected by the author at Belle Glade, Florida, on September 14, 1957 and at Bay Saint Louis, Mississippi, on September 3, 1958. In both cases the collections were made on field rice.

While the value of isolated new records is questionable, *S. orizicola* is of more than passing interest. Recent experiments by plant pathologists in Cuba and Venezuela have demonstrated that this species is the vector of "hoja blanca," a virus disease of rice. While the disease has not been found in our major rice growing areas, its eventual occurrence there is not unlikely. The collection at Belle Glade, Florida, was made on infected plants, while the specimens taken in Mississippi were associated with apparently healthly rice.—JAMES P. KRAMER, *Entomology Research Division, ARS, USDA, Washington, D. C.*